

Application No. 10/604,531
Docket No. H-205829-div
Amendment dated December 1, 2005
Reply to Office Action of September 12005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (Currently amended): A screen tooling utilized in a ~~for a~~ fiber preforming process, the screen tooling having a coating system fused to a tooling surface thereof, the coating system comprising a surface layer of a porcelain enamel composition, the screen tooling further having a porous fiber preform on the surface layer, the porous fiber preform having a shape corresponding to the tooling surface.

Claim 2 (Previously presented): The screen tooling according to claim 1, wherein the porcelain enamel composition comprises quartz, borax, boric oxide, potassium nitrate, sodium silicofluoride and manganese dioxide, the porcelain enamel composition optionally comprising compounds chosen from the group consisting of titanium dioxide, antimony oxide, cobalt oxide, and barium oxide.

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Claim 3 (Original): The screen tooling according to claim 1, wherein the porcelain enamel composition comprises, in weight percent, about 39 to 52 quartz, about 15 to 24 borax, about 7 to 12 boric oxide, about 5 to 12 potassium nitrate, about 3 to 8 sodium silicofluoride, about 3 to 12 manganese dioxide, up to 12 titanium dioxide, up to 8 antimony oxide, up to 1 cobalt oxide, and up to 1 barium oxide.

Claim 4 (Previously presented): The screen tooling according to claim 1, wherein the porcelain enamel composition is fired from a dry mixture comprising quartz, dehydrated borax, boric acid, potassium nitrate, sodium silicofluoride, and manganese dioxide, the dry mixture optionally comprising compounds chosen from the group consisting of titanium dioxide, antimony oxide, cobalt oxide, and barium oxide.

Claim 5 (Original): The screen tooling according to claim 1, wherein the porcelain enamel composition is fired from a dry mixture comprising, in weight percent, about 39 to 52 quartz, 15 to 24 dehydrated borax, 6 to 12 boric acid, 5 to 8 potassium nitrate, 3 to 6 sodium silicofluoride, and 3 to 12 manganese dioxide, up to 15 titanium dioxide, up to 3 antimony oxide, up to 1 cobalt oxide, and up to 1 barium oxide.

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Claim 6 (Original): The screen tooling according to claim 1, wherein the porcelain enamel composition is fired from a dry mixture comprising, in weight percent, about 46.5 quartz, about 21 dehydrated borax, about 7.5 boric acid, about 6 potassium nitrate, about 5 sodium silicofluoride, and about 11.5 manganese dioxide.

Claim 7 (Original): The screen tooling according to claim 6, wherein the dry mixture further comprises about 2.5 antimony oxide.

Claim 8 (Currently amended): The screen tooling according to claim 1, wherein the screen tooling is a perforated member, the coating system being continuous over the tooling surface ~~a surface~~ of the perforated member.

Claim 9 (Original): The screen tooling according to claim 8, wherein the coating system consists of the surface layer of the porcelain enamel composition.

Claim 10 (Currently amended): A screen tooling installed in a directed fiber preforming apparatus, the screen tooling comprising a perforated member and a continuous outer coating fused to a tooling surface thereof, the

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coating consisting essentially of a porcelain enamel composition.

Claim 11 (Original): The screen tooling according to claim 10, wherein the porcelain enamel composition comprises quartz, borax, boric oxide, potassium nitrate, sodium silicofluoride and manganese dioxide, the porcelain enamel composition optionally comprising compounds chosen from the group consisting of titanium dioxide, antimony oxide, cobalt oxide, and barium oxide.

Claim 12 (Original): The screen tooling according to claim 10, wherein the porcelain enamel composition comprises, in weight percent, about 39 to 52 quartz, about 15 to 24 borax, about 7 to 12 boric oxide, about 5 to 12 potassium nitrate, about 3 to 8 sodium silicofluoride, about 3 to 12 manganese dioxide, up to 12 titanium dioxide, up to 8 antimony oxide, up to 1 cobalt oxide, and up to 1 barium oxide.

Claim 13 (Original): The screen tooling according to claim 10, wherein the porcelain enamel composition is fired from a dry mixture comprising quartz, dehydrated borax, boric acid, potassium nitrate, sodium silicofluoride, and manganese dioxide, and optionally titanium dioxide, antimony

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oxide, cobalt oxide, and/or barium oxide.

Claim 14 (Original): The screen tooling according to claim 10, wherein the porcelain enamel composition is fired from a dry mixture comprising, in weight percent, about 39 to 52 quartz, 15 to 24 dehydrated borax, 6 to 12 boric acid, 5 to 8 potassium nitrate, 3 to 6 sodium silicofluoride, and 3 to 12 manganese dioxide, up to 15 titanium dioxide, up to 3 antimony oxide, up to 1 cobalt oxide, and up to 1 barium oxide.

Claim 15 (Original): The screen tooling according to claim 10, wherein the dry mixture comprises, in weight percent, about 46.5 quartz, about 21 dehydrated borax, about 7.5 boric acid, about 6 potassium nitrate, about 5 sodium silicofluoride, and about 11.5 manganese dioxide.

Claim 16 (Original): The screen tooling according to claim 15, wherein the dry mixture further comprises about 2.5 antimony oxide.

Claim 17 (New): A screen tooling for a fiber preforming process, the screen tooling having a coating system fused to a tooling surface thereof, the coating system comprising a surface layer of a porcelain enamel composition

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comprising quartz, borax, boric oxide, potassium nitrate, sodium silicofluoride and manganese dioxide, the porcelain enamel composition optionally comprising compounds chosen from the group consisting of titanium dioxide, antimony oxide, cobalt oxide, and barium oxide.

Claim 18 (New): The screen tooling according to claim 17, wherein the porcelain enamel composition comprises, in weight percent, about 39 to 52 quartz, about 15 to 24 borax, about 7 to 12 boric oxide, about 5 to 12 potassium nitrate, about 3 to 8 sodium silicofluoride, about 3 to 12 manganese dioxide, up to 12 titanium dioxide, up to 8 antimony oxide, up to 1 cobalt oxide, and up to 1 barium oxide.

Claim 19 (New): The screen tooling according to claim 17, wherein the surface layer is free of a release agent.

Claim 20 (New): The screen tooling according to claim 17, wherein the screen tooling is a perforated member, the coating system being continuous over the tooling surface of the perforated member.